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# THE CALIFORNIA BARTLETT PEAR SITUATION

## Economic Facts Bearing on Surplus Control

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The disastrously low returns from the 1932 Pacific Coast Bartlett crop have led growers to a serious consideration of methods of avoiding recurrence of starvation prices for Bartletts in the future. For several weeks groups of California Bartlett growers have been studying the possibility of cooperative action to eliminate future surpluses from fresh shipping and canning markets and thereby obtain better prices than would otherwise prevail. At the invitation of these groups of pear growers, members of the staff of the Giannini Foundation of Agricultural Economics of the University of California have attended the recent pear-grower conferences and presented the more important available facts bearing on the problem of surplus control in the Bartlett industry. These facts have been summarized briefly in this paper in order to have them readily available for further use by Bartlett growers in their efforts to improve the economic status of the industry.

### A Disastrous Season

The 1932 Pacific Coast Bartlett season proved to be the most unprofitable in at least thirty years. The average price to growers for picked fruit was less than $10 a ton in spite of the fact that about 60,000 tons of California pears were not harvested at all. The eastern market for fresh Bartletts was most disastrous, with average returns to California growers for unpacked fruit of only about $8 a ton, with a period of two or three weeks in which prices were below even the cost of packing and shipping. Oregon and Washington fared even worse as eastern prices, on the whole, failed to pay costs of packing, shipping and selling, returning almost nothing but "red ink" to growers.

Although canning Bartletts brought more than fresh shipments in 1932, the quantity canned was less than usual, particularly in California. California growers probably averaged between $13 and $14 a ton for No. 1 canning Bartletts. In Oregon and Washington the canning price was apparently not over $8 a ton. With packing and hauling costs of perhaps $3 per ton to be paid by growers, it is evident that the balance from both fresh shipments and canning tonnage left little to pay for spraying, pruning and cultural costs, and indicates that unless future prices are substantially better growers cannot afford to care for their orchards. Obviously but little care can be given to trees that bring a gross return of only $15 or $20 an acre which appears to have been about the average in California for the 1932 season.

We hope, and have reason to believe, that the market for fresh and canned Bartletts in the next few years will be more favorable than it has been the past

year. However, until there is a very marked improvement in the incomes and purchasing power of consumers, it seems probable that concerted limitation of fresh shipments and of the canned pack of Bartletts will be necessary if growers are to realize substantially higher prices for their fruit than they received in 1932. The best evidence available indicates that with the large pear crops that may normally be expected on the Pacific Coast in the next few years, prices will probably average little, if any, above costs of picking and hauling unless general curtailment of the tonnage marketed is effected by the united cooperative effort of growers.

## Possibilities of Surplus Control

Preliminary study by the Giannini Foundation shows very conclusively that there are real possibilities of increasing California growers' returns very substantially by restricting the Bartlett tonnage shipped east and the tonnage canned. Interstate shipments of California Bartletts during the 1932 season were probably not over 5,500 carloads. They returned California growers approximately $8 a ton for unpacked fruit, or about $550,000. Our analysis of the relation of California interstate Bartlett shipments and prices under the existing adverse demand and monetary situation in 1932 indicates that had shipment been restricted to only 4,000 carloads growers of the state might reasonably have expected an average return of nearer $30 a ton than $8 and a gross income nearer $1,500,000 than $550,000. Looking ahead for the next few years, it would appear that Bartlett growers of the state as a whole might reasonably expect to receive between two and three times as much gross income by restricting shipments to about 5,000 cars as could reasonably be expected for twice that tonnage.

The advantage of restricting the canned-pear pack is indicated by a study of the relation between the prices and sales of Pacific Coast canned Bartletts adjusted to the economic situation during the 1931-32 marketing season. Under the conditions prevailing during that season it appears that growers might reasonably have expected nearly three times as great a gross income for their canning pears by restricting the Pacific Coast canned pack by 20 per cent. Restriction of the canned pear pack, however, if equitable to both California and the Pacific Northwest, would require that each withhold about the same tonnage of canning pears, as approximately half of the Pacific Coast canned Bartletts have been packed in the Pacific Northwest during recent years.

## Pacific Coast Production

The bearing acreage of Bartletts now constitutes 75 per cent of the total Pacific Coast acreage of bearing trees. In California about 86 per cent of the bearing pear acreage is in Bartletts (see table 1) and in Oregon and Washington combined about 55 per cent. No official estimates of Bartlett production are available, but on the basis of the bearing acreage data and average Bartlett yields per acre (somewhat higher than other varieties, as the limited available data on yields indicate to be the case), Pacific Coast Bartlett production in the years 1928, 1930, and 1931 is estimated to have averaged roughly about 290,000 tons or about 76 per cent of the total production of all pears in Oregon, Washington, and California. A comparable estimate of California Bartletts for the three years specified, at 88 per cent of the total pear production of the state, gives a figure of roughly 196,000 tons. California has, therefore, in recent years produced about 67 or 68 per cent of the Bartlett crop of the Pacific Coast. In 1932 the California Bartlett crop probably amounted to at least 200,000 tons out of a total production of all varieties in California of 238,000 tons. Of this

total of all varieties, however, it is estimated that about 60,000 tons were unharvested in 1932. Probably 90 per cent of the unharvested tonnage was Bartletts.

## Fresh Bartlett Shipments

Fortunately, most California fresh Bartlett shipments do not compete directly with pears from other states. Figures 3 and 4 show that most California Bartletts are shipped before the middle or latter part of August. Therefore, Bartlett shipments from Oregon and Washington would seldom interfere with a California shipment-restriction program until after the fifth or sixth week of the California shipping season. Bartlett shipments from Lake, Mendocino, and El Dorado counties, the latest Bartlett-shipping counties in the state, however, frequently reach eastern markets when Northwest Bartlett receipts are plentiful.

## State-Wide Shipping Competition

Study of the movement of fresh pears from California by weeks or by ten-day periods* as pictured in figure 3 for 1930 and 1932 and in figure 4 for 1932 shows that the Sacramento River District** ordinarily ships almost all of the earlier pears from California during the first ten or fifteen days of the shipping season. Other districts usually ship very few Bartletts before the third main week of the shipping season. The quantity of Bartletts shipped east during the first two or, sometimes, three weeks of active movement from the state is usually not heavy enough to require restriction of shipments to maintain fairly satisfactory prices.

Although the Sacramento River District usually supplies almost all of the Bartlett shipments leaving California during the first ten days of active movement, and also a fairly large majority during the second ten-day period, well over half of its shipments ordinarily move from the state thereafter, actively competing with shipments from other districts which come into the majority about the fourth main shipping week. In other words, after about twenty days, or approximately three weeks of active shipping, the Sacramento River District is still the outstanding shipper and, moreover, remains so for about two weeks right at, or near, the peak load of shipments during the very time when state-wide restriction normally will be necessary in order to maintain reasonable prices.

The greatest need for shipment restriction, as far as the Sacramento River District is concerned, occurs during the period in which state-wide restriction would be necessary. Solano, Contra Costa, and Placer counties usually begin to ship a considerable tonnage by the third main shipping week, and by the fifth week ordinarily contribute the majority of Bartlett shipments from the state. The benefit of restriction upon the part of the River District alone when most needed, after the third shipping week, would largely be gained by other shipping districts and at the expense of River growers if other districts were not in the restriction program. For the River District to secure the greatest benefit from restriction of Bartlett shipments requires a state-wide restriction program.

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* Shipments are shown in figures 3 and 4 for ten-day periods because weekly data on movements by counties are not readily available.

** Shipments from Sacramento, San Joaquin, Yolo, Yuba, and Sutter constitute the Sacramento River District as shown in figures 3 and 4.

Study of figure 4 illustrates the fact that the canning-pear counties of Santa Clara, Sonoma, and Napa have shipped a small tonnage of fresh pears east during the usual period of heavy movement of Bartletts from the state. Much of their canning tonnage is harvested during the same period so that their shipments of fresh Bartletts to eastern markets might be substantially increased if it appeared in any season that their pears might return more from eastern shipments than from cannery sales. If canning pears were inadequately protected under a surplus restriction program, canning Bartlett prices might easily be forced so low that growers in these counties would turn to shipping much larger tonnages east. Such shipments coming at or near the peak movement obviously could greatly injure, or, perhaps, defeat a fresh-shipment restriction program.

## Canning Bartletts

Commercial canning of pears in the United States is usually confined to Pacific Coast Bartletts. The canned pack on the Coast averaged nearly four million cases a year in 1928, 1930, and 1931, utilizing an average of 105,000 tons, or about 37 per cent of the harvested Bartlett tonnage. (See figures 1 and 2 and tables 3 and 5.) The tonnage canned during these years averaged approximately one-fourth of the California harvested Bartlett crop, and about 60 per cent of the Northwest crop. Ten years ago Oregon and Washington contributed only about 25 per cent of the Pacific Coast canned pear pack, but during the three years 1928, 1930, and 1931 their contribution averaged just half of the total. Present estimates indicate that in 1932 about 45,000 tons of Northwest Bartletts were canned compared with only about 35,000 tons in California. The disastrously low returns from eastern sales of Northwest fresh Bartletts this year may result in growers from that section diverting a larger proportion of next year's crop into canning, thereby increasing competition for California canning Bartletts.

It is estimated that in recent years between 50 and 60 per cent of the Bartletts canned in California have come from orchards in the Santa Clara Valley which probably produces at least 30,000 tons of Bartletts in normal years. Nearly all of Santa Clara Bartletts are canned. Most Santa Clara Bartletts ripen at a time when eastern markets are loaded with Sacramento River pears and with eastern peaches, and so very few of them have been shipped east in the past. However, if canning pear prices are forced too low, Santa Clara growers might easily defeat a shipment restriction program by sending their pears east.

Bartletts from other pear districts in California have not been used so exclusively for canning as in the Santa Clara Valley. Very few Mountain Bartletts from El Dorado and Placer counties have been canned in the past. Rough estimates indicate that perhaps 50 to 75 per cent of Sonoma and Napa Bartletts have been canned and most of the balance shipped fresh. On the other hand, Contra Costa, Lake, and Mendocino counties and the Sacramento River section probably have shipped 80 to 85 per cent of their Bartletts to eastern markets. However, the proportion has varied considerably. In years when the peak of shipments is excessive and eastern prices unprofitably low, these sections have diverted a considerable tonnage to canneries. If excessive, such diversions might easily break the canning pear market. Should an excessive tonnage be diverted to canneries under a fresh shipment restriction program, the canning pear market might easily be ruined and force canning Bartlett districts to ship east in self defense.

Figure 1

PACIFIC COAST PEAR HARVESTED PRODUCTION AND UTILIZATION
AND CALIFORNIA FARM PRICE

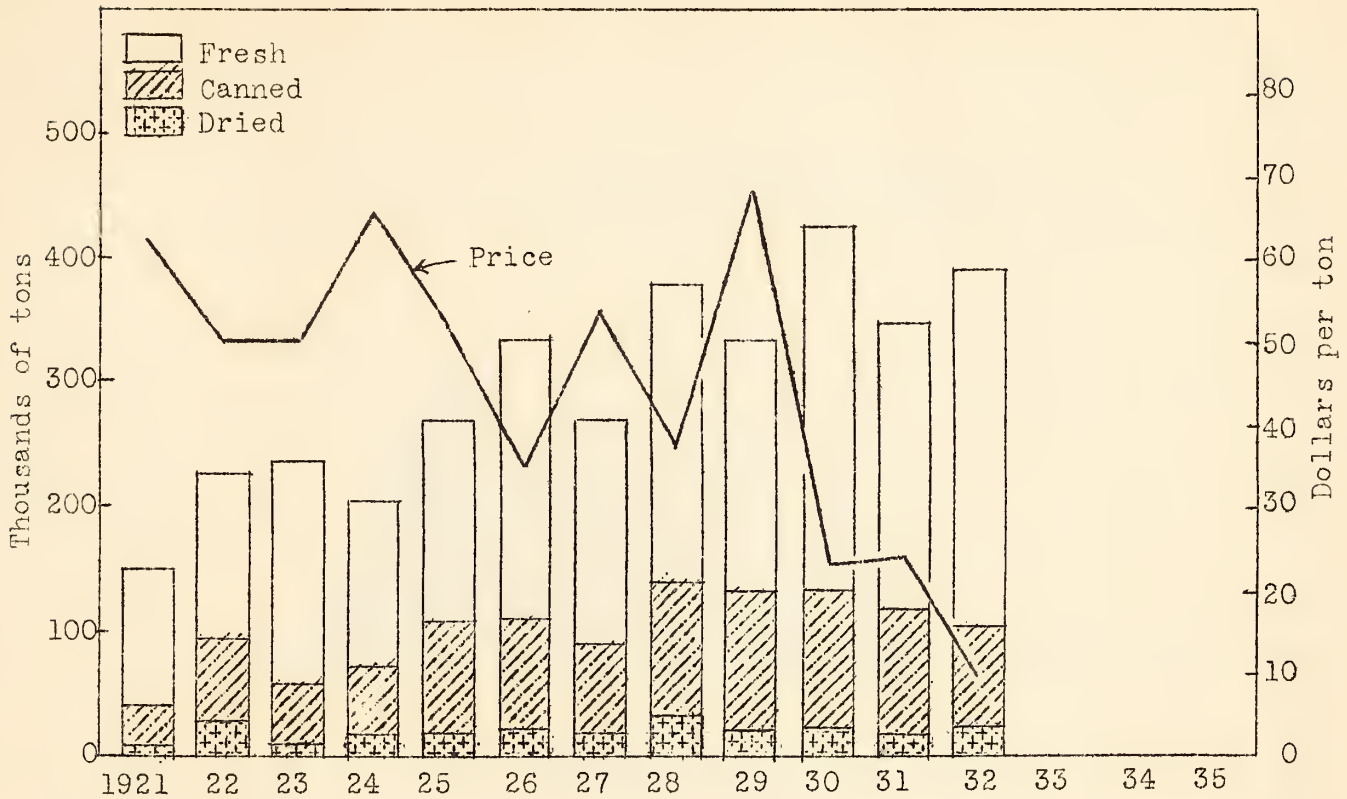
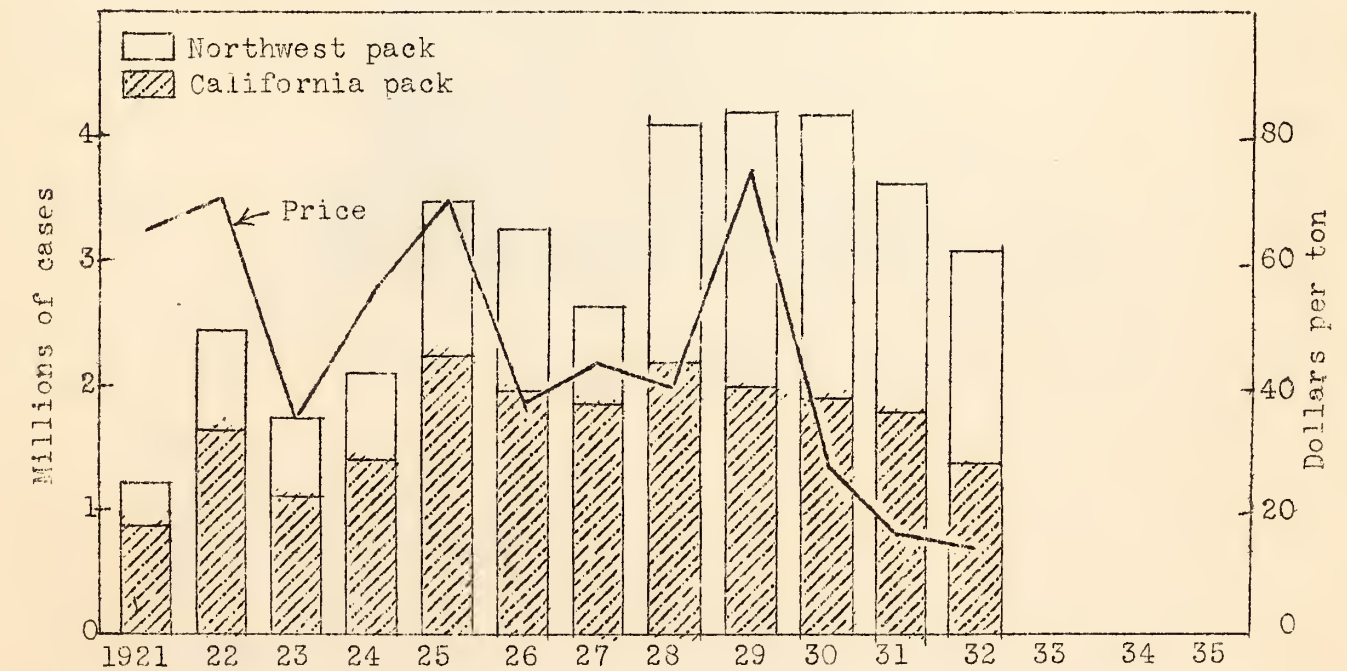



Figure 2

PACIFIC COAST CANNED BARTLETT PACK AND CANNING
PRICE TO CALIFORNIA GROWERS



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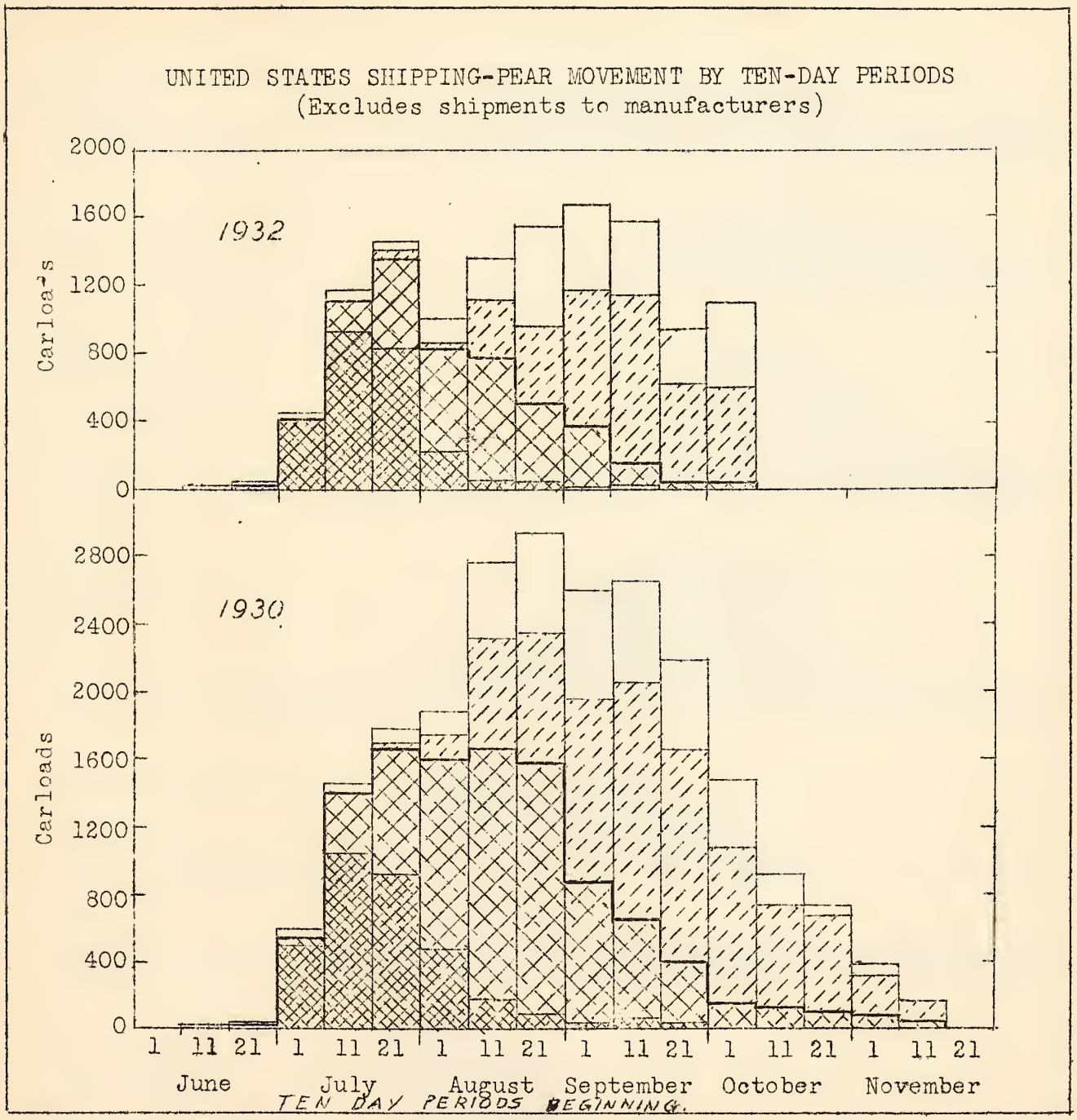
https://archive.org/details/californiabartle18shea

Figure 3




Legend

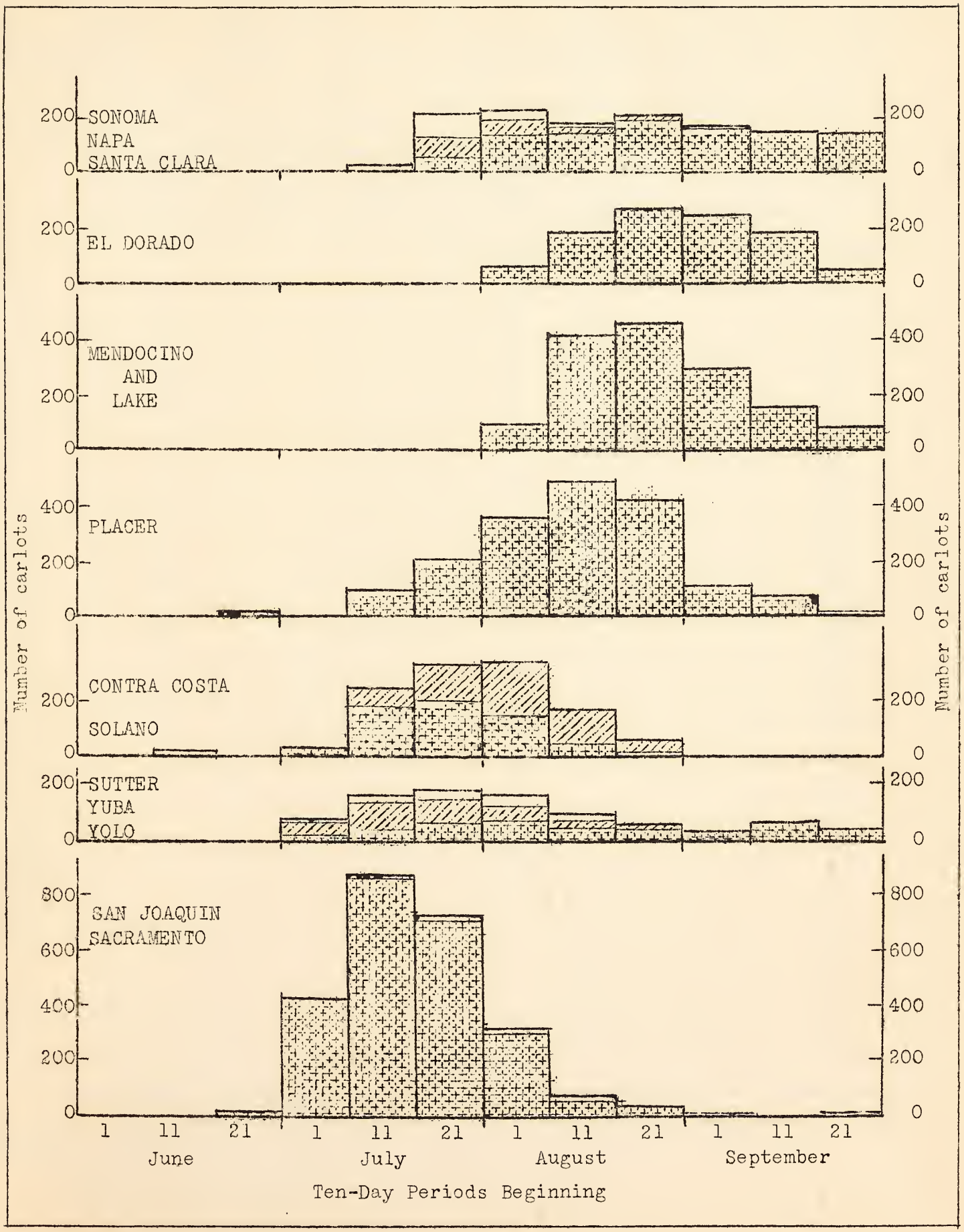
- Rest of United States*
- Oregon & Washington
- Other California counties
- Sacramento River counties**

* Shipments from "rest of United States are lagged ten days."

** The Sacramento River counties as shown cover shipments from Sacramento, San Joaquin, Yolo, Yuba and Sutter counties.

Figure 4

CALIFORNIA INTERSTATE RAIL SHIPMENTS OF PEARS BY CHIEF COUNTIES BY TEN-DAY PERIODS, 1930




Based on data compiled by W. F. Cox, Bureau of Agricultural Economics, U.S.D.A.

TABLE 1

Bearing Acreage and Production of California Pears*

| Year harvested | Bearing acreage | | Production, all varieties | | | | |
|---|---|---|---|---|---|---|---|
| | Total, all varieties | Bartletts only | Total | Harvested | Unharvested | Crop condition, per cent of full crop | Yield per acre |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | 1,000 acres | 1,000 acres | 1,000 tons | 1,000 tons | 1,000 tons | per cent | per cent |
| 1919 | 23 | -- | 115 | 115 | 0 | 98 | 5.0 |
| 1920 | 29 | -- | 102 | 102 | 0 | 85 | 3.5 |
| 1921 | 31 | -- | 86 | 86 | 0 | 63 | 2.7 |
| 1922 | 38 | -- | 150 | 150 | 0 | 96 | 4.0 |
| 1923 | 41 | -- | 133 | 133 | 0 | 90 | 3.2 |
| 1924 | 43 | -- | 133 | 133 | 0 | 73 | 3.1 |
| 1925 | 47 | -- | 181 | 181 | 0 | 85 | 3.9 |
| 1926 | 52 | -- | 207 | 207 | 0 | 90 | 4.0 |
| 1927 | 58 | 52 | 181 | 181 | 0 | 69 | 3.1 |
| 1928 | 61 | 54 | 225 | 225 | 0 | 86 | 3.7 |
| 1929 | 66 | 57 | 190 | 190 | 0 | 68 | 2.9 |
| 1930 | 65 | 57 | 272 | 241 | 31 | 84 | 4.2 |
| 1931 | 66 | 57 | 218 | 203 | 15 | 67 | 3.3 |
| 1932** | 70 | 60 | 238 | 178 | 60 | 66 | 3.4 |
| 1933 | | | | | | | |
| 1933 | | | | | | | |
| 1934 | | | | | | | |
| 1935 | | | | | | | |

*All acreage and production data compiled from reports of the California Crop Reporting Service, except the estimate of unharvested production in 1932. Bartlett acreage separate from total acreage not available before 1927.

**1932 data preliminary and subject to revision.

TABLE 2

Prices of California Pears

| Year | All pears | Bartletts only | | | | |
|---|---|---|---|---|---|---|
| | | Dried | Fresh shipments | | Canning | Canned |
| | Farm price | Packers' quotations | Delivered auction | Estimated f.o.b.* | Prices paid growers | Prices received by coast canners |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| | dollars per ton | cents per pound | dollars per box | dollars per box | dollars per ton | dollars per case |
| 1921 | 62 | 15.4 | 3.50 | 2.06 | 65 | 5.05 |
| 1922 | 50 | 13.1 | 2.75 | 1.49 | 70 | 5.10 |
| 1923 | 50 | 8.2 | 3.00 | 1.72 | 35 | 4.75 |
| 1924 | 66 | 17.3 | 3.85 | 2.51 | 55 | 5.57 |
| 1925 | 52 | 14.9 | 2.75 | 1.49 | 70 | 5.52 |
| 1926 | 35 | 9.1 | 2.65 | 1.40 | 37 | 4.47 |
| 1927 | 54 | 10.4 | 3.32 | 2.02 | 44 | 4.75 |
| 1928 | 37 | 10.0 | 2.86 | 1.66 | 40 | 4.08 |
| 1929 | 69 | 15.1 | 3.60 | 2.35 | 80 | 4.82 |
| 1930 | 23 | 7.1 | 2.31 | 1.10 | 30 | 3.54 |
| 1931 | 24 | 6.7 | 2.60 | 1.36 | 20 | 2.64 |
| 1932** | 9 | 5.7 | 1.93 | 0.72 | 14 | |
| 1933 | | | | | | |
| 1934 | | | | | | |
| 1935 | | | | | | |

* Eastern delivered-auction prices less freight and refrigeration charges and a commission of 7 per cent. Previous to 1930 the usual packing and loading charge was 55 cents. In 1932 it was approximately 50 cents.

** 1932 data preliminary and subject to revision.

TABLE 3

Pacific Coast Pear Production and Utilization

| Year harvested | Harvested production* | | Utilization, Pacific ** | | | | |
|---|---|---|---|---|---|---|---|
| | | | Canned | | | Dried in California# fresh equivalent | Fresh |
| | United States | Pacific** | Total Pacific | California | Northwest ø | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | 1,000 tons | 1,000 tons | 1,000 tons | 1,000 tons | 1,000 tons | 1,000 tons | 1,000 tons |
| 1919 | 360 | 173 | 39 | 29 | 10 | 25 | 109 |
| 1920 | 403 | 145 | 40 | 30 | 10 | 15 | 90 |
| 1921 | 271 | 148 | 32 | 22 | 10 | 7 | 109 |
| 1922 | 497 | 227 | 64 | 43 | 21 | 28 | 135 |
| 1923 | 428 | 237 | 46 | 30 | 16 | 11 | 180 |
| 1924 | 453 | 206 | 55 | 36 | 19 | 18 | 133 |
| 1925 | 497 | 273 | 91 | 59 | 32 | 19 | 163 |
| 1926 | 606 | 336 | 86 | 51 | 35 | 24 | 226 |
| 1927 | 441 | 268 | 70 | 49 | 21 | 19 | 179 |
| 1928 | 581 | 380 | 108 | 58 | 50 | 31 | 241 |
| 1929 | 507 | 337 | 111 | 53 | 58 | 23 | 203 |
| 1930 | 584 | 426 | 110 | 49 | 61 | 25 | 291 |
| 1931 | 545 | 340 | 96 | 47 | 49 | 24 | 235 |
| 1932" | 466 | 336 | 80 | 34 | 48 | 25 | 231 |
| 1933 | | | | | | | |
| 1934 | | | | | | | |
| 1935 | | | | | | | |

* See table 1 for unharvested California production.
** Pacific: California and Northwest, Washington, Oregon, and Idaho.
# Practically no U. S. pears dried commercially outside California.
" 1932 data preliminary and subject to revision.

ø Nearly all of the pack of the Pacific Northwest is canned in Oregon and Washington.

TABLE 4

United States Exports and California and Pacific Northwest Rail Shipments of Fresh Pears

| Year harvested | United States fresh exports | | | California interstate shipments | | | Pacific Northwest shipments ø | |
|---|---|---|---|---|---|---|---|---|
| | Total, years beginning July 1 | July and August* | 10 months beginning Sept. 1 | Total, June 1 to Dec. 31 | June, July, and August* | 4 months beginning Sept. 1 | Season's total | Season to Aug. 31 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | tons | tons | tons | cars | cars | cars | cars | cars |
| 1921 | 11,650 | -- | -- | 4,384 | 3,557 | 827 | 3,900 | 1,792 |
| 1922 | 18,392 | 4,745 | 13,647 | 5,799 | 4,240 | 1,559 | 4,560 | 1,341 |
| 1923 | 25,119 | 6,730 | 18,389 | 7,251 | 6,144 | 1,107 | 6,869 | 2,402 |
| 1924 | 20,726 | 5,663 | 15,063 | 5,781 | 4,946 | 835 | 3,965 | 1,612 |
| 1925 | 35,603 | 8,010 | 27,593 | 7,606 | 6,425 | 1,181 | 5,794 | 1,855 |
| 1926 | 36,939 | 10,022 | 26,917 | 9,789 | 8,597 | 1,192 | 8,208 | 3,522 |
| 1927 | 25,528 | 6,804 | 18,724 | 8,021 | 6,295 | 1,726 | 5,570 | 1,080 |
| 1928 | 41,424 | 11,291 | 30,133 | 9,456 | 7,528 | 1,328 | 10,336 | 3,223 |
| 1929 | 31,012 | 6,786 | 24,226 | 7,624 | 5,302 | 2,322 | 8,275 | 1,434 |
| 1930 | 67,335 | 14,011 | 53,324 | 10,979 | 8,483 | 2,496 | 11,319 | 2,561 |
| 1931 | 45,351 | 16,760 | 28,591 | 7,634 | 6,787 | 847 | 7,482 | 2,297 |
| 1932 | | 13,993 | | 5,918 | 5,086 | 832 | 7,000# | 1,314 |
| 1933 | | | | | | | | |
| 1934 | | | | | | | | |
| 1935 | | | | | | | | |

* Exports in June, July, and August are nearly all California Bartletts and California rail shipments in these months are very largely Bartletts.

\# Rough estimate subject to revision.

ø Pacific Northwest: Oregon, Washington, Idaho.

TABLE 5

Pacific Coast Canned Pear Pack, Carryover, Shipments, and Exports

(compiled by Dr. H. R. Wellman)

| Year June-May | Pack | June 1 carry-over from previous year | Available for shipment | Carry-over into following year | Shipments | United States exports | Domestic shipments | Percentage of shipments exported |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | 1000 cases* | 1000 cases* | 1000 cases* | 1000 cases* | 1000 cases* | 1000 cases* | 1000 cases* | 1000 cases* |
| 1921-22 | 1,216 | 206 | 1,422 | 50 | 1,372 | 807 | 565 | 59 |
| 1922-23 | 2,450 | 50 | 2,500 | 408 | 2,092 | 1,064 | 1,028 | 51 |
| 1923-24 | 1,739 | 408 | 2,147 | 142 | 2,005 | 894 | 1,111 | 45 |
| 1924-25 | 2,108 | 142 | 2,250 | 51 | 2,199 | 1,196 | 1,003 | 54 |
| 1925-26 | 3,477 | 51 | 3,528 | 514 | 3,014 | 1,680 | 1,334 | 56 |
| 1926-27 | 3,266 | 514 | 3,780 | 402 | 3,378 | 1,409 | 1,969 | 42 |
| 1927-28 | 2,648 | 402 | 3,050 | 167 | 2,883 | 1,236 | 1,647 | 43 |
| 1928-29 | 4,124 | 167 | 4,291 | 293 | 3,998 | 1,821 | 2,177 | 46 |
| 1929-30 | 4,221 | 293 | 4,514 | 932 | 3,582 | 1,163 | 2,410 | 32 |
| 1930-31 | 4,175 | 934 | 5,109 | 893 | 4,216 | 1,595 | 2,621 | 38 |
| 1931-32# | 3,652 | 893 | 4,545 | 873 | 3,672 | 1,795 | 1,877 | 49 |
| 1932-33# | 3,088 | | | | | | | |
| 1933-34 | | | | | | | | |
| 1934-35 | | | | | | | | |
| 1935-36 | | | | | | | | |

* No. 2½ can basis.

\# Preliminary - subject to revision.